

Notice of Allowability

Application No.

10/647,483

Examiner

Victor J. Taylor

Applicant(s)

BESPALOV ET AL.

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 19 July 2005.
2. ☒ The allowed claim(s) is/are 1-29.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 10
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Drawings

1. The drawings were received on 10 January 2005. These drawings are approved.

Response to Arguments

2. Applicant's arguments see the amendment of record to the specification, and the IDS filed 19 July 2005, with respect to the objection to the specification and IDS have been fully considered and are persuasive. The objection to the specification and IDS of 20 April 2005 is moot and has been withdrawn.
3. Applicant's arguments, see the amendments and arguments of record, filed 19 July 2005, with respect to the amendments to the claims and the arguments of record have been fully considered and are persuasive. The 103(a) rejection of 20 April 2005 is moot and has been withdrawn.

Allowable Subject Matter

4. Claims 1-29 are allowed.
5. The following is an examiner's statement of reasons for allowance:

I. The method for obtaining the resistivity measurement of the earth formation or a distance to a bed boundary by using a induction borehole tool having a tool body with a finite non-zero conductivity and using a transmitter located on the borehole tool and a receiver located on the tool spaced axially with received signals processed in a Taylor series expansion in $1/2$ of odd integer powers of time that represent the receive signal with processing steps for subtraction and filtering to remove the terms most dominated by the pipe effects is not found in the cited art of record.

Therefore independent claim 1, a method of obtaining a parameter of interest of an earth formation using a tool conveyed within a borehole in the earth formation and the tool having a body with a finite non-zero conductivity with steps for “using a transmitter on the tool for producing a first electromagnetic signal in the earth formation”...[and] in combination with “using at least one receiver axially separated from the transmitter on the tool for receiving a second transient signal resulting from the interaction of the first signal with the earth formation and the second transient signal dependent upon the conductivity and the parameter of interest”...[and] in combination with the particular combination of “determining from the second signal a third transient signal indicative of the said parameter of interest and substantially independent of the conductivity” is not found in the cited art of record

It is these limitations expressed in each of these claims and not found, taught, or suggested in the prior art of record, that makes these claims allowable over the prior art.

Claims 2-14 are variously dependent on the allowed independent claim 1 and are allowed at least for the reasons cited above.

Therefore independent claim 1, a system for determining a parameter of interest of an earth formation with a borehole in the earth formation with steps for “a tool used within the borehole and the tool having a tool body with a finite non-zero conductivity”...[and] in combination with “a transmitter on the tool which produces a first electromagnetic signal in the earth formation”...[and] in combination with “at least one receiver axially separated from the transmitter on the tool which receives a second transient signal resulting from the interaction of the first signal with the earth formation

and the second transient signal dependent upon the conductivity and the parameter of interest"...[and] with the particular combination of "a processor which determines from the second signal a third transient signal indicative of the parameter of interest and the third transient signal and substantially independent of the said conductivity" is not found in the cited art of record

It is these limitations expressed in each of these claims and not found, taught, or suggested in the prior art of record, that makes these claims allowable over the prior art.

Claims 16-29 are variously dependent on the allowed independent claim 15 and are allowed at least for the reasons cited above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

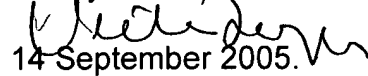
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor J. Taylor whose telephone number is 571-272-2281. The examiner can normally be reached on 8:00 to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on 571-272-2863. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2863

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

V. Taylor


14 September 2005.


MICHAEL NGHIEM
PRIMARY EXAMINER